§ 177-8. Special flood hazard area. [Amended 10-28-1969; 11-11-1975; 6-27-1978; 2-24-1987; 1-26-1988; 9-23-2008]

- A. Statement of purpose. The following standards are intended to regulate floodplain development, promote public health, safety, and general welfare, and minimize public and private losses due to flood conditions in specific areas.
- B. Definitions. For the purposes of this section, the following words shall have the meanings defined herein:

BASE FLOOD — The flood having a one-percent chance of being equaled or exceeded in any given year, also referred to as the one-hundred-year flood, as published by the Federal Emergency Management Agency (FEMA) as part of a Flood Insurance Study (FIS) and depicted on a Flood Insurance Rate Map (FIRM).

BASE FLOOD ELEVATION (BFE) — The elevation of the crest of the base flood or one-hundred-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

BASEMENT — Any area of the building having its floor subgrade (below ground level) on all sides.

BUILDING — See definition for "structure."

COST — As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be excluded include: cost of plans and specifications, survey costs, permit fees, outside improvements, such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures, such as garages, sheds, and gazebos.

DEVELOPMENT — Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving,

excavation or drilling operations or storage of equipment or materials.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) — The federal agency that administers the National Flood Insurance Program (NFIP).

FLOOD INSURANCE RATE MAP (FIRM) — The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas one-hundred-year floodplain) and the insurance risk premium zones applicable to a community.

FLOOD INSURANCE STUDY (FIS) — The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

FLOOD or FLOODING — A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

FLOODWAY — The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 1.0 foot. For the purposes of these regulations, the term "regulatory floodway" is synonymous in meaning with the term "floodway."

FUNCTIONALLY DEPENDENT USE OR FACILITY — A use or facility that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

HIGHEST ADJACENT GRADE (HAG) — The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

 $HISTORIC\ STRUCTURE\ -$ Any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or

preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved state program as determined by the Secretary of the Interior; or
 - (b) Directly by the Secretary of the Interior in states without approved programs.

LOWEST FLOOR — The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure usable solely for the parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor.

MANUFACTURED HOME — A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with a permanent foundation when attached to the required utilities.

MARKET VALUE — The market value of the structure shall be determined by using a computer assisted mass appraisal incorporating the three approaches to value prior to the start of the initial repair or improvement, or in the case of damage, the value of the structure prior to the damage occurring.

MEAN SEA LEVEL (MSL) — The North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced. The NAVD is approximately equal to the National Geodetic Datum of 1929 minus 0.8 feet. The NAVD is also approximately equal to the Hartford Metropolitan District Commission Datum minus 2.9 feet.

NEW CONSTRUCTION — Structures for which the start of construction commenced on or after October 28, 1969, and includes any subsequent improvements to such structures.

RECREATIONAL VEHICLE — A vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

SPECIAL FLOOD HAZARD AREA (SFHA) — The land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year. For purposes of this section, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard."

START OF CONSTRUCTION — For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement or other improvement was within 180 days of the permit date. The "actual start" means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erections of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the "actual start of construction" means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE — A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. A structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure.

SUBSTANTIAL DAMAGE — Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its predamaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT — Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (2) Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

VIOLATION — Failure of a structure or other development to be fully compliant with the community's floodplain management ordinance. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

WATER SURFACE ELEVATION — The height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas. The NAVD is approximately equal to the National Geodetic Datum of 1929 minus 0.8 feet. The NAVD is also approximately equal to the Hartford Metropolitan District Commission Datum minus 2.9 feet.

C. Areas to which this section applies. For the purpose of preventing damage from flood and other related dangers, the provisions of this section shall apply to all special flood hazard areas (SFHA)

within the Town of West Hartford in addition to any land within the Town of West Hartford which is located within a floodplain. A floodplain is defined as:

- (1) All land beneath the one-hundred-year storm event indicated in the West Hartford Flood Plain Management Study prepared by the Soil Conservation Service, dated August 1986, a copy of which is on file in the office of the Town Clerk.
- (2) All land located within the established stream channel encroachment lines (SCEL) created by the State Department of Environmental Protection and more particularly shown on maps entitled "Channel Encroachment Lines, Park River North Branch," dated September 25, 1964, and "Trout Brook, Channel Encroachment Lines," dated June 1968, and on file in the office of the Town Clerk.
- (3) All other lands reserved by the state for flood protection, including but not limited to:
 - (a) Bugbee Flood Retention Reservoir.
 - (b) Talcott Mountain Flood Retention Reservoir.
 - (c) Burnt Hill Flood Retention Reservoir.
 - (d) South Flood Retention Reservoir.
- (4) Additional lands reserved by special development district approvals, subdivision approvals, inland wetlands and watercourse permits, site plan approvals, building plot plans and permits and/or special floodplain studies for floodwater conveyance or storage.
- (5) All other as yet undefined lands near to a watercourse which is susceptible to flooding, whether a floodplain study has been performed or not.
- D. Basis for establishing the special flood hazard areas (SFHA).
 - (1) The special flood hazard areas (SFHA) identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for the Town of West Hartford, dated September 26, 2008, and accompanying Flood Insurance Rate Maps (FIRM), dated September 26, 2008, and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this chapter. Said mapping must take precedence when more

restrictive until such time as a map amendment or map revision is obtained from FEMA.

- (2) The SFHA includes any area shown on the FIRM as Zones A, A1-30, AE, AO, and AH, including areas designated as a floodway on a FIRM or FBFM. The SFHA does not include any area designated on the FIRM as "shaded zone x/other flood areas." SFHAs are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for a community. BFEs provided on the flood Insurance Rate Map (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. Also included are areas of potential, demonstrable or historical flooding, including any area contiguous with but outside the SFHA identified by FEMA, and where the land surface elevation is lower than the base flood elevation (BFE) as shown in the FIS, and the area is not protected from flooding by a natural or man-made feature. The FIRM and FIS are on file in the office of the Town Clerk, Town Hall, 50 South Main Street, West Hartford, Connecticut.
- E. Standards for plan approval. In a floodplain, no structure shall be erected, expanded or structurally altered, no land use shall be established, and no landfill, excavation, paving or grading shall be initiated until the Director of Community Services approves the development application and advises the approving authority of the application's conformance with the following standards:
 - (1) General standards. In all special flood hazard areas (SFHAs) the following provisions are required:
 - (a) New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water unless they are a functionally dependent use or facility.
 - (b) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems [(CFR 60.3(a)(5)].
 - (c) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters [CFR 60.3(a)(6)(i)].

(d) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding [CFR 60.3(a0)(6)(ii)].

- (e) Above-ground storage tanks (i.e., oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored to prevent flotation or lateral movement with the top of the fill pipe extending above the BFE and having a screw fill cap that does not allow for the infiltration of floodwater.
- (f) Notify adjacent communities and the Connecticut Department of Environmental Protection prior to any alteration or relocation of a watercourse, and assure that the flood-carrying capacity within the altered or relocated watercourse is maintained [CFR 60.3(b)(6) and (7)].
- (g) If any portion of a structure lies within the SFHA, the entire structure is considered to be in the SFHA and must meet the construction requirements of the flood zone.
- (h) Compensatory storage. The water-holding capacity of the floodplain, except those areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of floodwater at each elevation, up to and including the one-hundred-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided offsite with approval by the Director of Community Services.
- (i) Equal conveyance. Within the floodplain, except those areas which are tidally influenced as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in

footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

- (j) All new construction and substantial improvements in special flood hazard areas (SFHAs) shall:
 - [1] Be designed and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy [CFR 60.3.(a)(3)(i)];
 - [2] Be constructed with materials resistant to flood damage [CFR 60.3(a)(3)(ii)];
 - [3] Be constructed by methods and practices that minimize flood damages [CFR 60.3(a)(3)(iii)];
 - [4] Be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding [CFR 60.3(a)(3)(iv)].

(2) Specific standards.

- (a) Construction standards in special flood hazard areas (SFHA) Zones A and AE for residential and nonresidential construction. All new construction and substantial improvements of structures shall have the bottom of the lowest floor, including basement, elevated 2.0 feet above the base flood elevation (BFE) [CFR 60.3(c)(2) and (3)].
- (b) Manufactured homes. In all special flood hazard areas (SFHA), any manufactured homes placed or substantially improved shall be elevated on a permanent foundation such that the bottom of the lowest floor is 2.0 feet above the base flood elevation (BFE) and shall be securely

anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. This includes manufactured homes meeting one of the following location criteria:

- [1] Outside of a manufactured home subdivision;
- [2] In a new manufactured home subdivision;
- [3] In an expansion to an existing manufactured home subdivision; or
- [4] In an existing subdivision on which a manufactured home has incurred substantial damage as a result of a flood [CFR 60.3(b)(8) and 60.3(c)(6)].
- (c) Recreational vehicles. Recreational vehicles placed on sites within a SFHA shall be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions [CFR 60.3(c)(14)].
- (d) In a regulatory floodway, no encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any (0.00 feet) increase in flood levels during a base flood discharge. [CFR 60.3(d)(3)].
- (3) Standards for watercourses without established base flood elevations (unnumbered A Zone), adopted floodways and/or flood mapping.
 - (a) In the absence of base flood elevation (BFE) and floodway data, the Director of Community Services shall obtain, review and utilize any data available from a federal, state, or other source to assure that new or substantially improved residential structures are elevated to or above the base flood elevation and nonresidential structures are either elevated or floodproofed to or above the BFE. If no BFE can be determined, the lowest floor, including basement, must be elevated to two feet above the highest adjacent grade next to the structure [CFR 60.3(b)(4)].

(b) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A1-30 and AE unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the base flood elevation more than 1.0 foot at any point in the community [CFR 60.3(c)(10)].

- (c) Floodway data may be requested of an applicant for watercourses without FEMA-published floodways. When such data is provided by an applicant or whenever such data is available from any other source (in response to the municipality's request or not), the community shall select and adopt a regulatory floodway that must carry the waters of the base flood without increasing the BFE more than 1.0 foot at any point within the community [CFR 60.3(d)(2)].
- (4) Design standards for subdivision proposals. If a proposed subdivision is located in a special flood hazard area (SFHA), the following requirements shall apply:
 - (a) All subdivision proposals shall be consistent with the need to minimize flood damage [CFR 60.3(a)(4)(I)];
 - (b) All subdivision proposals shall have public utilities and facilities located and constructed to minimize or eliminate flood damage [CFR 60.3.(a)(4)(ii);
 - (c) All subdivision proposals shall have adequate drainage provided [CFR 60.3(a)(4)(iii);
 - (d) BFE data shall be required for all new subdivision proposals and other proposed developments greater than 50 lots or five acres, whichever is the lesser [CFR 60.3(b)(3)].

F. Approval procedure.

- (1) The application for approval of a development in a floodplain shall be submitted as part of a development application process to the approving authority and shall include, as a minimum, the following:
 - (a) Three black-and-white prints of a plot plan of the premises drawn to scale and certified by a licensed land

surveyor and civil engineer, showing the actual shape and dimensions of the lot, the size and location of all existing and proposed structures and land uses, the layout of parking and loading facilities and access thereto, existing and proposed grades and existing and proposed floodplain limits of all watercourses.

- (b) A detailed drainage study prepared by a registered professional engineer in the State of Connecticut, detailing existing and proposed hydrology and hydraulics of the site and any watercourses thereon. The study should include a predevelopment and postdevelopment analysis and statement of the development's effects on peak runoff and water surface elevations for all standard storm events from the five-to-one-hundred-year storm events.
- (c) Such other information as required by the Director of Community Services to determine compliance with these regulations.
- (d) The approvals from all appropriate state and federal agencies for the development project.
- (2) The Director of Community Services shall review and advise the approving authority of the proposed plan's compliance with these regulations within 30 days after receipt.
- (3) No building permit shall be issued which is not in conformance with the approved plan and with any other regulations governing the use of the applicant's property.
- G. Penalty. Any private person or any firm or corporation who violates this section shall be fined \$100 for each day that such violation is continued. Nothing herein contained shall prevent the Town of West Hartford from taking such lawful action as is necessary to prevent or remedy any violation.
- H. Structures already in compliance: A structure or development already in compliance with this section shall not be made noncompliant by any alteration, modification, repair, reconstruction or improvement and must also comply with other applicable local, state, and federal regulations. No structure or land shall hereafter be located, extended, converted, modified or structurally altered without full compliance with the terms of this section and other applicable regulations.

I. Abrogation and greater restrictions. This section is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this section conflicts or overlaps with another ordinance, regulation, easement, covenant, or deed restriction, the more stringent restriction shall prevail.

- J. Interpretation.
 - (1) In the interpretation and application of this section, all provisions shall be:
 - (a) Considered as minimum requirements;
 - (b) Liberally construed in favor of the governing body; and
 - (c) Deemed neither to limit nor repeal any other powers granted under state or federal law.
 - (2) Unless otherwise specifically defined herein, terms shall have the meanings ascribed to them in the regulations of the Federal Emergency Management Agency, National Flood Insurance Program, 44 CFR 59.1.
- K. Warning and disclaimer of liability. The degree of flood protection required by this section is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering consideration and research. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This section does not imply or guarantee that land outside the special flood hazard area or uses permitted in such areas will be free from flooding and flood damages. This section shall not create liability on the part of the Town of West Hartford or its agents, officers or employees for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder. The Town of West Hartford, its officers and employees shall assume no liability for another person's reliance on any maps, data or information provided by the Town of West Hartford.
- L. Severability. If any terms, phrases, sentence, paragraph, section or article of this section shall be declared invalid for any reason, such decision shall not affect the remaining parts of this section, and such parts shall continue in full force and effect and are hereby declared to be severable.